

Serial No. 10/582,313
Response to Office Action mailed November 3, 2009

CLAIM LISTING

1. (Withdrawn) A method of constructing a composite comprising, in any order:
 - selecting a first layer with a first surface energy;
 - selecting a second layer with a second surface energy greater than said first surface energy;
 - providing access in said first layer to said second layer;
 - bonding said first and second layers; so that said composite provides a unified structure wherein, the difference between said first surface energy and said second energy is sufficient such that a liquid placed atop said first layer at least partially penetrates said access in said first layer to said second layer.
2. (Withdrawn) A method as in claim 1 further comprising providing access in said first layer to said second layer through activating said composite.
3. (Withdrawn) A method as in claim 1 wherein said first surface energy is hydrophobic and said second surface energy is hydrophilic.
- 4-6. (Cancelled)
7. (Withdrawn) A method as in claim 1 wherein said first layer is a nonwoven layer and said second layer is a thermoplastic layer.
- 8-9. (Cancelled)
10. (Withdrawn) A method of constructing a composite comprising, in any order;
 - providing a first layer having a first surface energy;
 - providing a second layer having a second surface energy;
 - providing apertures in said second layer;
 - wherein said second surface energy is greater than said first surface energy;and
 - wherein said composite provides a unified structure, wherein, said unified structure has a differential surface energy gradient between said first and second layers.
11. (Withdrawn) A method as in claim 10 wherein said apertures are provided in said second layer using a pressure differential source.

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12. (Withdrawn) A method as in claim 10 further comprising providing access in said first layer through activating said composite.

13. (Withdrawn) A method as in claim 10 wherein access is provided in said first layer to at least one of said apertures so that a liquid placed atop said first layer at least partially penetrates said access in said first layer to said second layer.

14. (Withdrawn) A method as in claim 13 wherein said second surface energy is sufficiently greater than said first surface energy to at least partially drive fluid through at least one of said apertures of said second layer and so through said composite.

15. (Cancelled)

16. (Withdrawn) A method as in claim 10 wherein said first surface energy is hydrophobic and said second surface energy is hydrophilic.

17. (Cancelled)

18. (Withdrawn) A method as is claim 10 wherein said first layer is a nonwoven layer, and said second layer is a thermoplastic layer.

19-26. (Cancelled)

27. (Withdrawn) A method as in claim 10, wherein the steps of providing said first layer, providing said second layer, and providing said apertures comprise:

introducing a first molten thermoplastic material to a vacuum forming drum;

exerting a vacuum on the vacuum forming drum to form said second layer with said apertures;

introducing fibers of a second thermoplastic material onto the film during, or soon after formation of the film, to create said first layer and thereby form a composite; and

activating the composite to create localized disturbances in the nonwoven portion of the composite such that the second layer is exposed through the second layer.

28. (Withdrawn) A method as in claim 27 wherein said fibers are molten.

29-40. (Cancelled)

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41. (Previously Presented) A composite comprising a nonwoven fibrous web bonded to an apertured film to form a unified structure, wherein the unified structure has been activation stretched to create localized disturbances in the nonwoven fibrous web to expose the film, wherein the nonwoven web has a surface energy that is less than the surface energy of the apertured film such that the composite has a surface energy gradient within the unified structure.
42. (Previously Presented) The composite of claim 41, wherein the apertured film is a vacuum formed film.
43. (Previously Presented) The composite of claim 41, wherein the unified structure comprises a vacuum formed and vacuum laminated material.
44. (Cancelled)
45. (Previously Presented) An absorbent article comprising the composite of claim 41.
46. (Previously Presented) The absorbent article of claim 45, wherein the absorbent article is selected from a bandage, an incontinent product, and a female menstrual product.
47. (Previously Presented) The absorbent article of claim 45, wherein the composite is used as a topsheet.